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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/581,551

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EXAMINER

KIM, ALEXANDER D

ART UNIT

PAPER NUMBER

1656

NOTIFICATION DATE

DELIVERY MODE

06/16/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
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Office Action Summary	Application No. 10/581,551	Applicant(s) MIYAWAKI ET AL.	
	Examiner ALEXANDER D. KIM	Art Unit 1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-36 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Application Status

1. Claims 1-36 are pending in the instant case.

Restriction

2. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

- I. Claims 1, 12-17 and 18 (in part), drawn to a fluorescent protein of SEQ ID NO: 1 and its variant thereof having equivalent fluorescence properties; a fluorescent reagent kit comprising said fluorescent protein, fusion protein comprising said fluorescent protein; and a method for analyzing the localization or dynamics of the fusion protein of claim 12 in a cell.
- II. Claim 2, drawn to a fluorescent protein of SEQ ID NO: 3 and its variant thereof having equivalent fluorescence properties.
- III. Claim 2, drawn to a fluorescent protein of SEQ ID NO: 5 and its variant thereof having equivalent fluorescence properties.
- IV. Claim 2, drawn to a fluorescent protein of SEQ ID NO: 7 and its variant thereof having equivalent fluorescence properties.

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- V. Claim 2, drawn to a fluorescent protein of SEQ ID NO: 9 and its variant thereof having equivalent fluorescence properties.
- VI. Claim 3, drawn to a fluorescent protein of SEQ ID NO: 11 and its variant thereof having equivalent fluorescence properties.
- VII. Claim 3, drawn to a fluorescent protein of SEQ ID NO: 13 and its variant thereof having equivalent fluorescence properties.
- VIII. Claim 3, drawn to a fluorescent protein of SEQ ID NO: 15 and its variant thereof having equivalent fluorescence properties.
- IX. Claim 3, drawn to a fluorescent protein of SEQ ID NO: 17 and its variant thereof having equivalent fluorescence properties.
- X. Claim 3, drawn to a fluorescent protein of SEQ ID NO: 19 and its variant thereof having equivalent fluorescence properties.
- XI. Claim 3, drawn to a fluorescent protein of SEQ ID NO: 21 and its variant thereof having equivalent fluorescence properties.
- XII. Claim 3, drawn to a fluorescent protein of SEQ ID NO: 23 and its variant thereof having equivalent fluorescence properties.
- XIII. Claim 3, drawn to a fluorescent protein of SEQ ID NO: 25 and its variant thereof having equivalent fluorescence properties.
- XIV. Claim 3, drawn to a fluorescent protein of SEQ ID NO: 27 and its variant thereof having equivalent fluorescence properties.
- XV. Claim 3, drawn to a fluorescent protein of SEQ ID NO: 29 and its variant thereof having equivalent fluorescence properties.

- XVI. Claim 4, 7, 10-11 and 18 (in part), drawn to DNA encoding a fluorescent protein of SEQ ID NO: 1 and its variant thereof having equivalent fluorescence properties; a fluorescent reagent kit comprising said DNA, vector thereof and host thereof comprising said DNA.
- XVII. Claims 5 and 8, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 3 and its variant thereof having equivalent fluorescence properties.
- XVIII. Claims 5 and 8, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 5 and its variant thereof having equivalent fluorescence properties.
- XIX. Claims 5 and 8, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 7 and its variant thereof having equivalent fluorescence properties.
- XX. Claims 5 and 8, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 9 and its variant thereof having equivalent fluorescence properties.
- XXI. Claims 6 and 9, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 11 and its variant thereof having equivalent fluorescence properties.
- XXII. Claims 6 and 9, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 13 and its variant thereof having equivalent fluorescence properties.
- XXIII. Claims 6 and 9, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 15 and its variant thereof having equivalent fluorescence properties.
- XXIV. Claims 6 and 9, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 17 and its variant thereof having equivalent fluorescence properties.

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- XXV. Claims 6 and 9, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 19 and its variant thereof having equivalent fluorescence properties.
- XXVI. Claims 6 and 9, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 21 and its variant thereof having equivalent fluorescence properties.
- XXVII. Claims 6 and 9, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 23 and its variant thereof having equivalent fluorescence properties.
- XXVIII. Claims 6 and 9, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 25 and its variant thereof having equivalent fluorescence properties.
- XXIX. Claims 6 and 9, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 27 and its variant thereof having equivalent fluorescence properties.
- XXX. Claims 6 and 9, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 29 and its variant thereof having equivalent fluorescence properties.
- XXXI. Claims 19, 30-34 and 36 (in part), drawn to a chromoprotein of SEQ ID NO: 37 and its variant thereof which has light absorbing properties; and a reagent kit comprising said chromoprotein protein or a fusion protein thereof.
- XXXII. Claim 20, drawn to a fluorescent protein of SEQ ID NO: 39 and its variant thereof having equivalent fluorescence properties.
- XXXIII. Claim 21, drawn to a fluorescent protein of SEQ ID NO: 41 and its variant thereof having stokes shift of 100 nm or greater.
- XXXIV. Claim 21, drawn to a fluorescent protein of SEQ ID NO: 43 and its variant thereof having stokes shift of 100 nm or greater.

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- XXXV. Claim 21, drawn to a fluorescent protein of SEQ ID NO: 45 and its variant thereof having stokes shift of 100 nm or greater.
- XXXVI. Claim 21, drawn to a fluorescent protein of SEQ ID NO: 47 and its variant thereof having stokes shift of 100 nm or greater.
- XXXVII. Claims 22, 25, 28, 29 and 36 (in part), drawn to DNA encoding a chromoprotein of SEQ ID NO: 37 and its variant thereof which has light absorbing properties; and a reagent kit comprising said DNA, vector thereof and host cell thereof.
- XXXVIII. Claims 23 and 26, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 39 and its variant thereof having fluorescent property.
- XXXIX. Claims 24 and 27, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 41 and its variant thereof having stokes shift of 100 nm or greater.
- XL. Claims 24 and 27, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 43 and its variant thereof having stokes shift of 100 nm or greater.
- XLI. Claims 24 and 27, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 45 and its variant thereof having stokes shift of 100 nm or greater.
- XLII. Claims 24 and 27, drawn to DNA encoding a fluorescent protein of SEQ ID NO: 47 and its variant thereof having stokes shift of 100 nm or greater.
- XLIII. Claim 35, drawn to a method for analyzing the localization or dynamics of the fusion protein of claim 30 in a cell.

3. The inventions listed as Groups I-XLIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The invention of Group I, Claims 1, 12-17 and 18 (in part), a first product and a method of use, requires as its special technical feature of the protein having the amino acid sequence shown in SEQ ID NO: 1. This special technical feature is not required by Groups II-XLIII for following reasons. The invention of Groups II-XV and XXXI-XXXVI are drawn to a polypeptide having distinct structure by virtue of distinct amino acid sequence and fluorescence properties compared to the SEQ ID NO: 1 of Group I. The invention of Groups XVI-XXX and XXXVII-XLII are drawn to a DNA which comprises structurally distinct nucleotides; whereas the SEQ ID NO: 1 of Group I comprises amino acids. The method of Group XLIII requires the product of Claim 30 and does not require the special technical feature of SEQ ID NO: 1. Therefore, Group II-XLIII do not share the special technical feature of the SEQ ID NO: 1; thus, do not relate to a single general inventive concept.

Election

4. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Notice of Possible Rejoinder

5. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of

an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXANDER D. KIM whose telephone number is (571)272-5266. The examiner can normally be reached on 10AM-6:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on (571) 272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander D Kim/
Examiner, Art Unit 1656